Faculty of Language and Communication

BETWEEN BILINGUALISM AND MULTILINGUALISM: DETERMINANTS OF FOREIGN LANGUAGE VOCABULARY ACQUISITION

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by

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This final year project is submitted in partial fulfilment of the requirements for the
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ABSTRACT

BETWEEN BILINGUALISM AND MULTILINGUALISM: DETERMINANTS OF FOREIGN LANGUAGE VOCABULARY ACQUISITION

TENGKU NUR NABILA BINTI TENGKU AHMAD DANDARAWI

A total of 44 undergraduates who belong to 2 groups of bilinguals and multi-linguals were compared their foreign language (FL) vocabulary size and foreign language learning motivation to examine the factors that affect learners' FL performance. Both groups are undergraduates who were taking 2nd level Mandarin or Japanese as one of their courses. 2 diagnostics test were conducted to determine learners' L2 proficiency, followed by a foreign language vocabulary test, and a motivation inventory to observe motivational factors of FL learners in learning foreign languages in an academic setting. The influence of initial proficiency in English on undergraduates' FL vocabulary level was found. Correlation between motivation factors (*eMpowerment, Usefulness, Success, Interest, & Caring*) varies in Mandarin group and Japanese group. The results attained established the importance of L2/L3 basic proficiency, a sense of control over classroom contents and environment, and the interest level for the course in nonverbal performance. Given the insufficient number of participants, it was difficult to verify whether bilingualism and multilingualism determine learners' FL vocabulary level.

KEYWORDS: BILINGUALISM, MULTILINGUALISM, FOREIGN LANGUAGE VOCABULARY, MOTIVATIONAL FACTORS

ABSTRAK

ANTARA BILINGUALISME DAN MULTI-LINGUALISME: FAKTOR-FAKTOR PEMEROLEHAN PERBENDAHARAAN BAHASA ASING

TENGKU NUR NABILA BINTI TENGKU AHMAD DANDARAWI

Seramai 40 orang mahasiswa yang terdiri daripada 2 kumpulan iaitu dwibahasa dan multi-bahasa telah dibandingkan saiz vokabulari bahasa asing mereka dan motivasi untuk mengkaji faktor-faktor yang mempengaruhi prestasi pelajar dalam bahas asing yang diambil. Kedua-dua kumpulan merupakan siswazah yang berdaftar dalam kelas bahas asing Mandarin atau Jepun, tahap ke-2 sebagai salah satu daripada kursus akademik mereka. Siswazah juga berbeza dalam penguasaan bahasa Inggeris (L2) dan jumlah bahasa yang boleh dituturi. 2 ujian diagnostik telah dijalankan bagi menentukan tahap L2 pelajar, diikuti oleh ujian kosa kata bahasa asing, dan inventory motivasional untuk membuat pemerhatian tentang faktor-faktor motivasional pelajar bahasa asing dalam mempelajari bahasa asing tersebut dalam persekitaran akademik. Kemahiran awal dalam Bahasa Inggeris mempengaruhi tahap perbendaharaan kata bahasa asing pelajar. Selain dariada itu, hubungan antara faktor motivasi (eMpowerment, Useful, Success, Interest, & Caring) berbeza dalam kumpulan Mandarin dan kumpulan Jepun. Hasil analisa yang dicapai membuktikan kepentingan penguasaan asas L2 / L3, kawalan ke atas kandungan dan persekitaran kelas, dan tahap minat terhadap kursus dalam prestasi non-verbal pelajar.Memandangkan bilangan peserta kajian yang tidak mencukupi, ianya sukar untuk mengesahkan sama ada dwibahasa dan multi-bahasa menentukan tahap perbendaharaan kata FL pelajar.

KATA KUNCI: DWIBAHASA, MULTI-BAHASA, PERBENDAHARAAN KATA BAHASA ASING, FAKTOR-FAKTOR MOTIVASI

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LIST OF ABBREVIATIONS

2K	2000-word Level
AWL	Academic Word Level
ESL	English as a Second Language
FL	Foreign Language
FLC	Faculty of Language and Communication
L2	English Language (Bilingual)
L3	English Language (Multilingual)
UNIMAS	Universiti Malaysia Sarawak
VLT	Vocabulary Level Test

CHAPTER 1

INTRODUCTION

1.1 Research Problem

Foreign languages such as Mandarin, Japanese, French, Arabic, Korean and many more are being learned by Malaysians both formally and informally. In fact, most universities offer foreign language courses as one of the university courses consisting of three levels for each language that students have the option to take up. This is believed to be a strategic step in broadening students' opportunities in the working world (Achilike, 2007, as cited in Odo, 2012) as multilingualism is seen to have been amplified through globalisation (Cenoz, 2013), ensuring a competitive edge among undergraduates (Edwards, 2004). However, undergraduates face problems in mastering or acquiring the foreign language well and fail the course, causing them to repeat the course or register into a different one the next semester in order to graduate. The situation becomes critical especially when foreign language courses consist of three levels – even more with the fact that the capability in mastering a foreign language differs from one individual to another (Ellis, 2005).

Researchers found that factors including age, behaviour, culture, exposure, background, and vocabulary play a significant role in determining one's ability to reach a certain level of foreign language mastery. As Wilken's historic remark still stands, "while without grammar very little can be conveyed, without vocabulary nothing can be conveyed" (Wilkins, 1972). According to Carter and McCarthy (2014), lexicon development also facilitates with regard to foreign language acquisition, claiming that vocabulary is important in order to achieve an extensive proficiency in foreign language competency. It is also

believed that vocabularies are easier to memorise or acquire through paired association, where learners associate a foreign vocabulary to either a synonym, translation of the word in their native language, or a graphical presentation. Schmitt (2000) added that lexical knowledge is fundamental in communication competency and second language acquisition.

Many researches have been done on the mastery in foreign language, and more on the level of proficiency among monolinguals and bilinguals. However, only a few studies looked at bilinguals and multi-linguals, and whether the claims that the more languages an individual knows, the easier it is for them to master foreign languages at a mediocre level. To investigate Malaysians mastery in foreign language among monolinguals and bilinguals in Malaysia is difficult as Malaysia is a multicultural country with Malay, Chinese and Indian as the three main ethnic groups. According to Romaine (2008), Malaysia is one of 20 nations that consists of multi languages and people who are at least bilinguals. Malaysia's national language is Malay, while its official languages are Malay and English. Besides being exposed to the English subject in schools, Malaysians also use English in official matters – resulting in bilingualism in Malaysia. So, in most cases, English is the 2nd language for Malaysians.

Hence, this renders Malaysian undergraduates either bilinguals or multi-linguals. Usually, undergraduates are offered four foreign language courses in university which are Mandarin, Japanese, French and Arabic. As set by some universities, foreign language courses are optional to other students and compulsory to particular groups of students, especially language students. Although the purpose of such terms is to help students in the future, problem arises when students are unable to pass the course even after countless efforts. The researcher has found that the problem is interesting as language capability is a seed to

greater possibilities for undergraduates such as; intercultural awareness (Lo Bianco, 2010), language as an asset, and academic performance acceleration.

1.2 Aim of study

The aim of the research is to observe whether Malaysian undergraduates find it difficult to master a third or fourth language. The following research questions will be answered in this research:

1a. Does knowledge of more than 2 languages help learners increase their vocabulary faster?

1b. Does proficiency in the 2000 word (2K) of the English Vocabulary Level Test (VLT) help increase FL vocabulary?

1c. Does proficiency in Academic Word List (AWL) of the English VLT help increase subsequent FL?

2. Are learners' vocabulary scores in Mandarin/Japanese VLT affected by initial word knowledge in English?

3. What are the factors affecting learners' vocabulary development in FL courses?

1.3 Objectives of study

To achieve the aim of the study, the following objectives have been set:

1. To explore differences in vocabulary size between learners who already know two languages (bilinguals) with learners who know more than two languages (multi-linguals).
2. To verify whether learners' initial proficiency influences their FL vocabulary size.
3. To determine the main factors influencing bilingual and multi-lingual foreign language learners' motivation in the classroom.

1.4 Operational definition of terms

1.4.1 Foreign language

A language that is learned in formal and informal settings but it is not spoken by the community is defined as a foreign language (Moeller & Catalano, 2015). This definition provides a conspicuous distinction between foreign language and second language where second language is a learned language that is spoken in the learners' environment.

1.4.2 Vocabulary

Vocabulary is identified as lexis and lexicons in the Linguistics field. Vocabulary or vocabulary size is a list of words that learners have been exposed to (Linse, 2005; Kurniawan, 2017). In foreign language courses in universities, learners are exposed to the most basic sets of vocabularies in the language that should allow daily communication. Typically, undergraduates are exposed to a maximum of 1000 vocabularies in the span of 18 months. There are two kinds of vocabulary: 1) Receptive vocabulary and 2) productive vocabulary. Vocabulary is defined as one of the core components in language that plays a minor role and provides the basis for the four skills in language proficiency which are speaking, listening, reading, and writing (Richards, 1976). Schmitt (1999) further explained vocabulary as a targeted word list of a language; words that are known or used by learners through textbooks, "including single words, compound words and idioms". According to Webb (2008), words that are not used in speaking and writing are receptive vocabulary. Productive vocabulary on the other hand is a list of words that speakers comprehend and are used frequently speaking and writing (Webb, 2005).

1.4.3 Mastery

Mastery is given the definition of comprehensive knowledge or skills in a particular subject or activity. There are opinions saying that *mastery, proficiency,* and *competence* are interchangeable, while others believe that each word holds different levels of expertise. Rosenberg (2012) stated that there are four levels to mastery, the four levels being *novice, competent, experienced,* and *master/*expert. However, Mosher (2007) perceives *mastery* as "simply reaching a certain level in something, whereas *competence* is the ability to apply what has been mastered." The research will be based on the second definition which sees mastery as a lower level than competence and proficiency.

1.4.4 Vocabulary Mastery

Vocabulary mastery refers to a list of words that a learner has been exposed to. Learners need to achieve a certain level of prowess of a language vocabulary to function at a particular level in comprehension, pronunciation, spelling and understanding of references (Nugroho, Nurkamto & Sulistyowati, (2012), excluding the ability to use the words in oral and written forms.

1.4.5 Bilingualism

Bilingualism is the frequent use (as by a community) of two languages (Bilingualism, 2019). Valdes and Figueroa (1994) defined it as possession of more than 1 language competence. Bloomfield (1993) claimed bilingualism as a state where an individual possesses a "native-like mechanism over two languages", indicating that if an individual does not speak the language like a native speaker, that person is not

considered as a bilingual. As a result, the definition will reject a vast majority of people from the category as argued by Butler (2012). After further research and studies done on bilingualism, researchers came up with a more comprehensive definition of bilingualism which is: A state of need to speak two or more languages in life, including language aptitudes in different areas (Grosjean, 2010). Another broaden definition of bilingualism is possession of one or more language competence, which is a general definition of bilingualism. These far-reaching definitions have led to a blurry distinction between bilingualism and multilingualism, thinking that the concepts are the same.

1.4.6 Multilingualism

The term "multilingual" means the use of three or more languages (Aronin, 2019). Gunesch (2003) measures multilingualism based on two basic areas: 1) quantity (number) and quality (mastery) of the languages that an individual is able to speak. While trilingualism (mother tongue and two foreign languages) is one form of multilingualism as claimed by Cenoz, (2001), Li (2008) defined multilingualism as the ability to communicate in more than one language, be it active (through speaking and writing) or passive (through listening and reading). This study will combine both definitions as individuals' ability to communicate in three or more languages in a passive manner.

1.4.7 Undergraduates

Undergraduates who are currently studying in Universiti Malaysia Sarawak (UNIMAS), and are registered in 2nd level foreign language courses (Mandarin or Japanese) in Faculty of Language and Communication (FLC).

1.4.8 Factors

Main factors are the central elements that motivate something to happen. Main factors that will be looked at in this study are based on the framework proposed by Hall and Ecke (2003): *How people learn a third language*. Three categories that will be looked at are:

- Learner – age, motivation
- Learning – L2 status
- Language – language competence

1.4.9 Motivation

Motivation is defined as constantly changing cumulative arousal that "initiates, directs, coordinates, amplifies, terminates, and evaluates the cognitive and motor processes whereby initial wishes and desires are selected, prioritised, operationalised and (successfully or unsuccessfully) acted out," (Dörnyei & Ottó, 1998). The study will be basing off the MUSIC Inventory which views *eMpowerment, Usefulness, Success, Interest,* and *Caring* as elements that motivate learners in a classroom setting.

1.4.10 Proficiency

Proficiency refers to the individual's knowledge and use of a language (Bagarić & Djigunović, 2007). In this study, researcher will also be looking at initial proficiency in English which will be tested through a short diagnostic test which is based on Nation's Productive Vocabulary 2000-word Level Test and University Level Word List to determine if the learners are high or low level students based on their initial proficiency. 83% is the passing score for the test, which is why those who

answered less than 15 questions out of 18 correctly will be categorised into the weak proficiency group. While the score of 15 and above will be classified as good proficiency.

1.4.11 Diagnostics Test

Diagnostics Test is a test that serves as a guide to understand the student's general level and will serve as an assistive tool for the study to discover learners' strengths and weaknesses (Zhao, 2013).

1.4.11(a) Productive Vocabulary Test

Productive Vocabulary Test is a test that requires subjects to complete a particular word in a sentence. To stipulate a smaller scope of answers, the first letters of the words are provided.

E.g.

1. I'm glad we had this opp_____ to talk.
2. There are a doz_____ eggs in the basket.

1.4.11(b) Vocabulary Levels Test

Vocabulary Levels Test (Nation, 1983; Schmitt, Schmitt, & Clapham, 2001) indicates the word frequency level that should be used to select words for learning, consisting of five levels measuring knowledge of vocabulary at the 1000, 2000, 3000, 4000, and 5000 levels.

1.5 Significance of study

The research aims to provide significant contributions to the related fields of this research, namely bilingualism, multilingualism, and foreign language researches, and what roles do bilingualism and multilingualism play in terms of students' vocabulary mastery. Due to high demand in foreign languages exposure in Malaysia, it is crucial for authorities, educators, and students to know factors that affect students' foreign language vocabulary level and how to overcome this issue.

In Malaysia, it is a known fact that the possession of foreign languages will benefit students in the future, especially when they are to be compared among themselves. In these circumstances, foreign languages will give students the upper hand as it is a sign of possible opportunities for the employer as well. However, it would be a waste if the level of mastery is only limited to the most basic knowledge in the language, meaning that due to some factors, students are unable to be competent in the foreign language even at an average level.

The study may also add on to the grasp and findings of past studies that have been done all over the world on effects of bilingualism and multilingualism on foreign language acquisition. Past research studies done were more inclined towards monolinguals and bilinguals, comparing them in the aspect of acquiring a third language. Conversely, this research is more orientated towards multilingualism on foreign language acquisition, and whether or not it makes a significant difference in the vocabulary mastery levels between bilinguals and multi-linguals.

Studies related to English as a Second Language (ESL) or FL learners' vocabulary size largely address the minimum number of words known by learners for their university

studies (Nation & Beglar, 2007; Schmitt, Cobb, Horst & Schmitt, 2017). Given the importance of vocabulary knowledge to tertiary students whose medium of instruction is in English, an understanding of adequate knowledge for the foreign language at specific stages can foster better teaching styles. Motivation studies are also found to be useful for understanding learners' needs, goals, and process of learning vocabulary. A high level of motivation can compensate for learner's lacking language aptitude and learning, while insufficient motivation can hinder even the most exceptional learners (Dörnyei, 1998). No study has connected Nation's Vocabulary test with motivation, linking it to motivational factors based on Academic Motivation Inventory (MUSIC) among undergraduates.

While investigating learners' vocabulary size, it is important to decide the unit of counting a word based on a standardized measure since Nation (2007) and Treffers-Daller (2013) argue that an incorrect counting can lead to overestimation or faulty results. The number of words required to meet a lexical coverage percentage in different language settings is known as vocabulary size, and according to Francis and Kucera (1982), a large vocabulary size is mandatory for university L2/FL learners as there is growing evidence that there is a significant relationship between text coverage and vocabulary size. Therefore, when novice FL/L2 can show progress in terms of reaching closer towards the 2000 most frequently used vocabulary in the language (Meara, Lightbrown & Halter, 1997) it is possible to redesign the curricula more constructively.

CHAPTER 2

REVIEW OF LITERATURE

2.1 The advantages of bilingualism or multilingualism in language acquisition.

In a study namely Bilingual Effects on Cognitive and Linguistic Development: Role of Language, Cultural Background, and Education by Barac and Bialystok (2012), 4 distinct groups of 26 English monolinguals, 30 Chinese-English bilinguals, 28 French-English bilinguals, and 20 Spanish-English bilinguals were compared in terms of executive control task and language tasks. According to Bialystok, Majumder, and Martin (2003), there will not be an evident comparison of accomplishment between bilinguals and monolinguals in terms of vocabulary and linguistic tasks. In fact, bilingual children performed more poorly than monolingual children especially in vocabulary assessments (Bialystok, Luk, Peets, & Yang, 2010; Oller, Pearson, Cobo-Lewis, 2007). However, in this research it was proven that some bilinguals do perform better than monolinguals and other bilingual groups. The participants were evaluated on the measurement of *Kaufman Brief Intelligence Test, 2nd Edition (KBIT–2) box completion, Peabody Picture Vocabulary Test, 3rd Edition (PPVT–III), Clinical Evaluation of Language Fundamentals, 4th Edition (CELF–4), The Wugs Test,* and *Color-Shape Task Switching.* There were no distinctions found between the children in the questionnaire, KBIT–2 or box completion times. But the Spanish-English bilinguals did perform better than the other 2 groups in PPVT–III and The Wugs Test, having almost similar results as the English monolinguals, whereas all bilingual groups exceeded the monolingual group in task switching. The highlight of the results is the fact that Spanish-English bilinguals were either on the same level as monolinguals or better, proving that there are advantages to bilingualism and language learning. However, it was also found that this

might be because of the language similarity factor between Spanish and English. Thomas (1998) made the same comparison and came up with a conclusion that:

> Bilinguals learning a third language seem to have developed a sensitivity to language as system which helps them perform better on those activities usually associated with formal language learning than monolinguals learning foreign language for the first time. (Thomas, 1998).

Mohammad Hossein Keshavarz and Hamideh Astaneh (2004) had also looked at bilingualism and language learning in their study, The Impact of Bilinguality on the Learning of English Vocabulary as a Foreign Language (EFL). The goal of the study was to compare two bilingual groups and a monolingual group of EFL students based on a controlled productive ability vocabulary test. Their age, sex, nationality, and level of instruction were controlled by the researchers. A total of 90 EFL students of Turkish-Persian bilinguals, Armenian-Persian bilinguals and Persian monolinguals (30 students each) were instructed to complete 18 productive items of 2000 and 3000 words-level each based on Controlled Productive Ability Test (CPAT) as an indication of their degrees of knowledge (Nation, 1990). The results presented in the study are similar to the previous study by Barac and Bialystok (2012), where the bilingual groups scored higher than the monolingual group. However, it was also found that higher foreign language vocabulary achievement can be attained when the first two languages are learned in a formal setting – in this case, the Armenian-Persian bilinguals outperformed the Turkish-Persian bilinguals as both languages are taught officially. This highlights the importance of language as one of the subjects in formal education.

In a different study by Bialystok, Luk, Peets, and Yang (2010), Receptive Vocabulary Differences in Monolingual and Bilingual Children, the vocabulary size between 773 English

monolingual children and 966 bilingual children, age from 3 to 10 years old were compared based on their scored in the Peabody Picture Vocabulary Test (PPVT). Although there was no particular experiment that was carried out for this research, data was collected through multiple studies with the same criteria which are: 1) English educated at school, 2) non-English home language, 3) fluent in both English and non-English language (as per reported by the parents), and 4) use both languages on a daily basis. Surprisingly, the results proved that monolinguals outdo bilinguals in every aspect of PPVT. Gollan, Montoya, Cera, and Sandoval (2008) explained that this might be due to weaker relations between words and concepts for bilingual individuals. Other studies have also shown the same pattern of higher vocabulary scores for monolinguals even in adults (e.g., Bialystok, Craik, & Luk, 2008; Portocarrero, Burright, & Donovick, 2007). These claims are actually against the results provided by Mohammad Hossein Keshavarz and Hamideh Astaneh (2004), and Barac and Bialystok (2012). However, researchers made it clear that possessing a smaller vocabulary size does not interfere with bilinguals' verbal skills, properties of lexical knowledge and academic achievement.

2.2 The role of vocabulary in language learning.

Li, Ying, and Pui (2011) studied the level of vocabulary among Mandarin-English bilinguals in Lexical Development in Mandarin-English Bilingual Children. The aim of the research was to trace age-related changed in cross-language distribution of lexical knowledge among Mandarin-English bilingual children. 35 children participated in the study. Prior to conducting the tests, the children's parents were asked to fill out a questionnaire (based on Gutierrez-Clellen & Kreiter, 2003) regarding the child's language and educational history. The children are divided into two groups of: 1) 3-5 year olds (younger group) and 2) 6-8 year olds (older group). The children were then observed through their performance in picture

naming task and picture identification task to probe their lexical knowledge. This research provided proof that age is a factor in vocabulary size growth in both Mandarin and English.

Other studies have also investigated the rate of vocabulary size development (Cobo-Lewis, Pearson, Eilers, & Umbel, 2002; Hammer, Lawrence, & Miccio, 2008) and lexical abilities (Kohnert & Bates, 2002). Most researches done were conducted on Spanish-English bilinguals proved that the growth of vocabulary was more dynamic in the English language than Spanish. Similar results were acquired from Li et. al (2011) results. The .results of a research by Mohammad Hossein Keshavarz and Hamideh Astaneh (2004) on The Impact of Bilinguality on the Learning of English Vocabulary as a Foreign Language also supported the same outcome in the scope of Iran population. Furthermore, the research highlighted the importance of academic and oral exposure to achieve a higher level of vocabulary in the foreign language, especially when learned in a formal setting.

A different study conducted by Sen and Kuleli (2015) had the aim to determine the effects of vocabulary size and vocabulary depth on reading in EFL context on three hundred and sixty-one university students who were studying in preparatory programme of Duzce University, School of Foreign Language in spring semester of 2013/2014 academic year. It has been established how general vocabulary size and reading and comprehension abilities are interrelated, especially in foreign languages (Nagy 1988). This study utilised Nation and Beglar (2007) Vocabulary Size Test (VST) containing 140 vocabulary items, measuring the participants' knowledge of non-guessable 14,000 words. Data was also collected using Words Associate Test by Read (1998) to assess the depth of vocabulary. Qian (1999; 2002) also stressed on the importance of vocabulary depth – deemed as more important to achieve a higher level of comprehension. Researchers analysed the data acquired through SPSS,

looking at vocabulary breadth, vocabulary depth and reading performance. There were 2 significant results shown: 1) vocabulary size positively effects FL learners' vocabulary depth and 2) reading performance is affected by the number of words known by learners and enhanced if they know the words in depth. It was concluded that the bigger a learner's vocabulary knowledge, the more in depth they know the items; resulting in better performance – which is aligned with previous studies (Henriksen, Albrechtsen, & Haastrup, 2004; Li & Kirby, 2014; Staehr, 2008; Qian, 1999).

In 2015, Coxhead, Nation, and Sim examined the vocabulary size of native speakers of English in their research: Measuring the Vocabulary Size of Native Speakers of English in New Zealand Secondary Schools. The research was a cross-sectional study with a total number of two hundred and twenty-seven native speakers; from as young as 13 years old until 18 years old who came from 8 different schools in Aotearoa or New Zealand. The participants were asked to take a 20,000 version vocabulary size test (VST) based on the British National Corpus (BNC) individually, either online or on paper – depending on the availability of computer facilities at their respective schools. 100 questions were asked in two versions of the VST, version C and E which are equivalent to Nation's version A and B. According to Nation (2013), the VST used measures speakers' knowledge in written form. The results of the research showed that age plays a role in vocabulary size and that the vocabulary size of around 11,000 word families are enough to cover subject-matter study – excluding technical terms or jargons – even more easier for them to cover subjects that are not as technical such as language. Another research that support the results are such as in Biemiller's and Slonim's (2001) where they had asked younger children (6 to 9 years old) to read sentences and write the meaning of certain words. Similarly, the vocabulary size

increased as age increased with 6 year olds at 5,200 root words and 9 year olds at 8,400 root words.

2.3 The impact of L1/L2 on foreign language proficiency.

In Martirosyan, Hwang, and Wanjohi (2015) study "Impact of English Proficiency on Academic Performance of International Students", the association between multilingualism and academic success were investigated among international undergraduates who originated from non-English speaking countries. A survey form of self-reported questionnaire was developed and randomly distributed to 54 international students, who were ranked as sophomores, juniors or seniors. The results of the study showed that surprisingly, those who spoke more than two languages obtained lower overall GPA, as English (foreign language) was the language used to teach every course. Even though the results proved to be interesting, it is not fully reliable as the sample of multi-linguals was too small, as Kovalik (2012) stated that this could have distorted the results. According to Cenoz (2003), multilingual lexicon is more complicated than that of bilingual as it requires specific characteristics from the interaction between different linguistic systems. Cenoz (2003) explained that characteristics of languages involved have important roles and are link to typological distance. This also means that the separate storage for different languages is linked when two closely related lexical knowledge is used, as suggested by De Bot (1992). An overall statement on the matter has been made claiming that bilingualism has more privileges than monolingualism (Cenoz & Hoffman, 2003; Cenoz, 2003). Still, there are opinions proclaiming that proficient prowess in using three and more languages do not have a clear boundary. A study by Dorian (1986) on Gaelic-English community attested to the proclamation as the result of the study presented that the community had minimal control over their performance for the multi languages, but had outstanding receptive competence. This is well aligned with the influence of I-language

(competence) which is speakers' knowledge of languages as stated in Chomsky's theory Universal Grammar (UG). Although UG is not a part of language acquisition theories, there are individuals who admitted to the influence of E-language (language use), in accordance to UG.

Littlewood and Yu (2009) observed the use of the first language (L1) by foreign language (FL) teachers in the course of teaching, in a study namely "First Language and Target Language in the Foreign Language Classroom". Many researchers in the past have strong opinions that FL teachers should constantly and consistently use the target language (TL) – in this case, foreign language in FL classroom for justifications such as: Use of TL in FL classes is how learners will be exposed to more comprehensible inputs (Krashen, 1985), teachers are learners' main resource to build their FL foundation (Turnbull, 2001), and the interference of L1 in TL/FL learning may affect acquisition level. The first data that was analysed was collected from Turnbull (2001), looking at self-reports or observations of four French teachers in Canadian secondary schools. Littlewood and Yu also interviewed 50 2nd year tertiary students from Hong Kong (HK) and Mainland China (ML) on their English teacher's use of L1 (Cantonese or Putonghua) in the class. It was found that English teachers in HK use L1 20% of the time, whereas English teachers in ML use L1 64% of the time. The students were also asked the reasons why their teacher use L1. Results showed that FL teachers usually speak in L1to establish productive social relationships, convey complex meanings; save time, and control the group. Researchers concluded that the use of L1 in a FL classroom can do harm in FL learning, if utilised in a strategic way, it can be helpful in achieving language learning goals, reaching framework goals, attain affective and interpersonal support, and handling the classroom.

Comprehensively, Sparks, Patton, Ganschow, and Humbach (2009) also did a study on L1 and L2 relationship in the research "Long-term Relationship among Early First Language Skills, Second Language Aptitude, Second Language Affect, and later Second Language Proficiency. In this study, fifty-four students were observed for over 10 years from the first grade in order to determine their oral and written L2 proficiency – considering 4 variables which are: 1) L1 skills (first grade until fifth grade), 2) L1 aptitude, 3) L2 aptitude, and 4) L2 affect (motivation and anxiety). The aim of the study was to determine the best predictors of L2 proficiency among a battery of L1 academic aptitude, L1 achievement, L2 aptitude and L2 affective measures. Each participant in the research has completed their 2n year of the L2 by the end of 10^{th} grade. Researcher had a number of types of testing measures. L1 achievement was measured through word decoding (Woodcock Reading Mastery Test, Woodcock, 1987); spelling (Test of Written Spelling, Larsen & Hammill, 1986); reading comprehension (Formal Reading Inventory A & B, Wiederholt, 1986); phonological awareness (Linda Auditory Conceptualisation Test A & B, Lindamood & Lindamood, 1979); vocabulary (Revised Peabody Picture Vocabulary Test, Dunn & Dunn, 1981); listening comprehension (Woodcock Reading Mastery Test – Revised Passage Comprehension subtest G & H, Woodcock 1987). Other instruments were applied as well such as the Test of Cognitive Skills (CTB) to determine L1 aptitude, MLAT Long Form to ascertain L2 aptitude, L2 Motivation Survey – to look at learners' motivation, and Foreign Language Classroom Anxiety Scale (FLCAS) to verify students' anxiety in learning FL in the classroom. As a result, researchers found that all five variables (L1 skills, L1 aptitude, L2 aptitude, L2 motivation, L2 anxiety) are significant in L2 proficiency. However, L2 aptitude and L1 skills are stronger predictors in comparison to L2 motivation because it alone is insufficient to acquire and master an L2.

2.4 The role of motivation in language acquisition and performance.

In their research, Motivation and Vision: An Analysis of Future L2 Self Images, Sensory Styles and Imagery Capacity Across Two Target Languages (Dörnyei's & Chan, 2013), motivation is seen as a crucial factor in language learning. This study is based on the latest theory which is L2 Motivational Self System which was proposed by Dörnyei's (2005; 2009). According to Dörnyei's, three main constituents build the motivation construct which are *Ideal L2 Self* (learners' internal desire), *Ought-to L2 Self* (social pressure), and *L2 Learning Experience* (engagement in the learning process). Past studies have shown that the *Ideal L2 Self* is a rather dominant predictor in relation to language learning (e.g. Csizer & Lukacs, 2010; Magid, 2012; Papi, 2010). The aim of the study is to verify the claim that learners' capability to form mental imagery partly affects motivation intensity. A self-reported questionnaire (English and Mandarin) and motivational measures (Taguchi, Magid, & Papi, 2009), visual and auditory style scales based on Cohen et al.'s (2001) Learning Style Survery (LLS) and Reid's (1984) Perceptual Learning Style Preference Questionnaire (PLSPQ), and imagery measures (Richardson, 1994) were utilised to observe the link between learner characteristics, sensory and imagery aspects, learners' *Ideal L2 Self* and *Ought-to L2 Self*, and their achievements. Data were collected from 13 to 15 year old Year 8 students (82 boys and 88 girls) in Hong Kong, who were of Chinese ethnicity, spoke Cantonese as their first language, and were studying both English and Mandarin at a lower intermediate level. Results of the research proved the powerful impact of *Ideal L2 Self* on grades, but not *Ought-to L2 Self* as per shown by past studies (e.g., Csizer & Kormos, 2009; Csizer & Lukacs, 2010; Taguchi et al., 2009). Positive association between *Ideal L2 Self* and learners' effort in learning was also found which affected learners' grades and proficiency in the language. Another notable outcome of the study was the inclusion of visual learning styles as a notable component in learners' future L2 self.

A research conducted by Gonzales and Lopez (2015), “Foreign Language Learning Motivation Questionnaire: Further Examine of a Six-Factor Model”, examined the reliability and validity of the model to assess types of motives in learning an FL. Although many scholarly researches in various academic backgrounds have taken the multifaceted concept of motivation, there has not been a theory that covered it in totality (Dörnyei, 1998). Six hundred and forty college students, taking an undergraduate course from both private and public universities partook in the study, where 68% of the sample was female and 34% was from public universities. Each participant must have taken an FL course for at least one semester in Mandarin, French, Nihongo, or Spanish. More than half of the sample has been registered in an FL course for a year. 50 items – then 40 items – Foreign Language Learning Motivation Questionnaire (FLLMQ) were used to measure six factors which are: 1) Career-economic need, 2) cultural understanding need, 3) communicative-affiliation need, 4) self-satisfaction, 5) self-efficacy, and 6) cultural integration need, and a supplemental questionnaire to acquire undergraduates’ demographic information. With the help of the FL teachers, undergraduates who volunteered were instructed to answer both questionnaires during FL course period. A Confirmatory Factor Analysis (CFA) was also conducted to verify the established six-factor model used, which was found to support FLLMQ structure. The six factors aforementioned were also categorised into two: 1) instrumental (FL learning is a means to an end), and 2) integrative (a positive nature towards the FL community and desire of becoming more similar to the members of the language. The results denoted that self-reported skills and learners’ attitudes towards FL learning are significantly influenced by FL motivation, aligning with previous past researches’ results (Williams, Burden, & Lanvers, 2002; Yu, 2010; Yuanfang, 2009). Since it was proven that motivation is crucial in FL

learning or SLA, language teachers are recommended to attain better understanding of students' motivation to ensure better proficiency.

In a different research, The Role of EFL Learners' Demotivation, Perceptions of Classroom Activities, and Mastery Goal in Predicting Their Language Achievement and Burnout by Jahedizadeh, Ghanizadeh, and Ghonsooly (2016), demotivation in English as Foreign Language (EFL) was delved into in order to propose an effective model for EFL learning and academic performance. The Structural Equation Modelling (SEM) was utilised as it proposed the direct and indirect roles of demotivators such as teachers, class characteristics, classroom environment, classroom materials, lack of interest, and experiences of failure. Two hundred and fifty EFL students – varying in terms of age, major and level of education – were chosen through purposive sampling to complete the 4 questionnaires in Persian version of *Demotivation Scale* (Sakai & Kikuchi, 2009), *Maslach Burnout Inventory Student-Surver (MBI-SS)* (Schaufeli et al. 2002), *Achievement Goal Orientation Inventory (AGOI)* (Midgley et al., 1998), and *Students' Perceptions of Classroom Activities* (Gentry & Gable, 2001), including their demographics. Researchers found that only class characteristics do not have a relationship with students' burnout state, where students are instructed to only pass exams and get good grades – indicating familiarity to the pattern to the extent of it becoming their motivational basis (Nowell, 2007). Other than that, when students are burnt out, it was observed that they do not find the class interesting, directly affecting students' motivation at a mastery level which also has an implication on their academic achievement. Researchers believed that this study is significant and should be conducted from different angles to gain a deeper comprehension of the issue of demotivation and its impacts on FL learning.

The MUSIC Model of Academic Motivation Inventory invented by Jones (2012) was utilised in a different research, Measuring Students' Motivation: Validity Evidence for the MUSIC Model of Academic Motivation Inventory (Jones & Skaggs, 2016) to the validity of the model and measure students' beliefs of the five components in the model which are *eMpowerment*, *Usefulness*, *Success*, *Interest,* and *Caring*. 338 undergraduates of multiple courses were given a questionnaire near the end of their respective courses. In order to test the validity, researchers compared the models inventory to Learning Climate Questionnaire (LCQ), Utility Value Scale, Perceived Competence Scale, Interest Scale, Classroom Life Instrument (CLI), Effort/Importance Scale, and Instructor and Course Ratings. Analysis was done through two phases to assess the qualities of the MUSIC Inventory and examine the construct and predictive validity of the MUSIC Inventory by comparing the scores attained to other instruments mentioned previously. Results showed that the model is valid as there was a correlation found between inventories in the MUSIC Inventory and another four inventories that were used as references. It was also found that MUSIC Inventory is a practical tool that can be used easily without losing any essence in the data/results to recognise motivation and participation regarding a course.

2.5 Theoretical framework of study

2.5.1 Factors Conditioning Cross Lexical Influence (Hall & Ecke, 2003)

Hall and Ecke (2003) proposed five domains that lead to cross lexical influence which are *Learner*, *Learning*, *Language*, *Events,* and *Words*. For this research, researcher will only be considering three domains: *Learner*, *Learning* and *Language*.

2.5.2 MUSIC Model of Motivation (Jones, 2009; 2015)

The MUSIC Model of Motivation (Jones, 2009, 2015) is a model that can be used in any subject area (a) to design instruction that motivates students, (b) to diagnose strengths and weakness of instruction, and (c) to research relationships among factors critical to student motivation. It provides theories on students' psychological needs, impacts of social environment on these specifications, and alterations of learners' perception and attitude towards the course, depending on whether or not their personal requirements are understood. The five components in the model are teaching strategies in the effects they have on students' motivation. The same key principles of the model are that instructors need to ensure that students: 1. have control of their learning environment in the course, 2. understand how the coursework is useful for their future, 3. believe that they can succeed at the coursework, 4. find the instructional methods and coursework interesting, and 5. feel that the instructor cares about their performance and well-being in the course (Jones, 2009, 2015).

2.6 Conceptual framework of study

In the current research, researcher will be focusing on three domains based on Hall and Ecke's (2003) model which are learner, learning and language and their effects on vocabulary size. Variables such as age and initial language (English language) proficiency will be controlled. Researcher will also delve more into the motivational factors based on MUSIC Inventory. The diagram below shows the summary of the conceptual framework of this study:

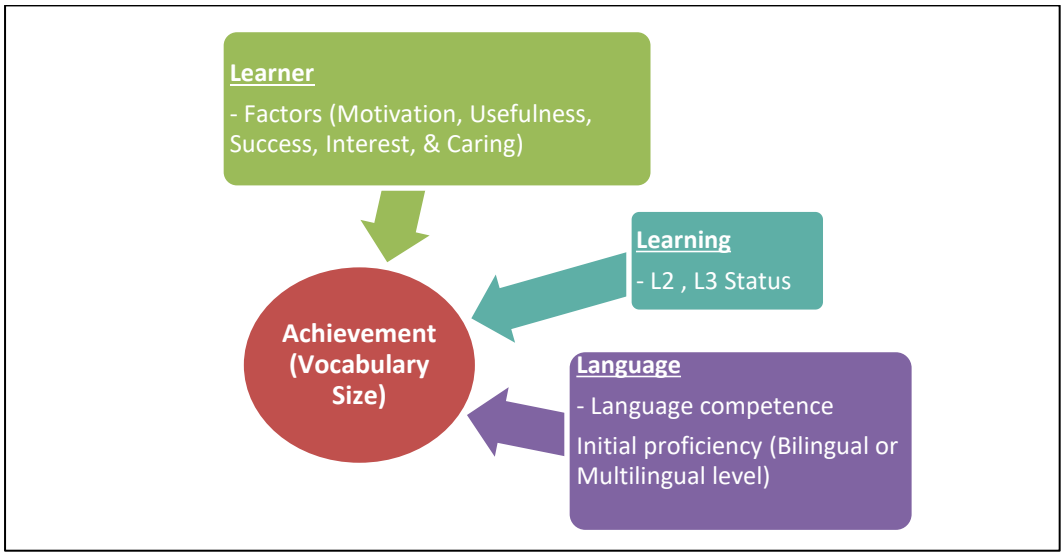


Figure 1. Conceptual framework of the study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research design

The research design of this study is a causal-comparative research. This type of research is a quantitative research that makes use of scientific sampling and questionnaires in order to provide accurate statistics that measure properties of the population. This method allows comparison between groups to be made (Sukamolson, 2007). A descriptive design of quantitative research was done to explain students' proficiency in foreign languages and make inferences about broader groups beyond those being studied (Holton & Burnett, 2005). Quantitative method structurally investigates a current phenomenon by collecting quantifiable data and executing statistical, mathematical, or computational modus operandi. The results of a quantitative research are seen in numbers that serve as proofs that explain the phenomenon that is being reflected based on the observations. Cohen and Manion (1980) stated the definition of a quantitative research as a descriptive statement of the fact or reality in the real world, instead of what it is supposed to be. Researches that had been done on bilingualism and multilingualism by past researchers consist of a mixture of both quantitative and qualitative methods. However, quantitative method is chosen because the purpose of the research is to observe the phenomenon that is happening in a particular group. The quantitative method used in this research includes questionnaire and quantitative analysis using Statistical Package for the Social Sciences (SPSS) Software.

3.2 Selection of data

As Malaysians are at the very least bilinguals, – if not multi-linguals – finding a group of monolinguals to compare to bilinguals and multi-linguals will be impossible. For this research, a purposive sampling will be done on only two groups of undergraduates in a Malaysian university who are bilinguals and multi-lingual. These two groups will then be narrowed down to only bilingual and multilingual students are in second level of the foreign languages which are Mandarin second level and Japanese second level. Before the respondents are asked to answer the questionnaire on language attitudes and language backgrounds, a consent form will be distributed to acquire their agreements in using their information as part of the data. After the respondents have given their consents, they will then be given 3 diagnostics tests (refer to Appendix A) and 1 self-reported questionnaire (refer to Appendix B). Researcher is targeting to attain 40 sets of data for this study based on the following criteria:

1. Respondents must be either bilingual or multilingual.
2. Respondents must be registered in 2nd level foreign language (Mandarin or Japanese).
3. Respondents must have minimal exposure to the foreign language they are taking both informally and formally.

3.3 Instruments

3.3.1 Diagnostics Test – Nation's Productive Vocabulary 2000-word Level Test 1(ai) and Nation's University Level Word List 1(aii)

The first 2 diagnostic tests are directly taken from Nation's Productive Vocabulary 2000-word Level Test and Nation's University Word List (refer to Appendix 1 (ai) and (aii)) to determine the respondents' initial proficiency in English.

Both tests consist of statements with a half-blank space for respondents to answer. They are given hints based on the first few letters of the correct vocabulary that fits the context given by the sentence. This is important for the researcher to divide the participants into 2 distinct groups which are: a) less proficient group and b) proficient group.

3.3.2 Diagnostics Test (b) – Nation's Vocabulary test

In this part of the questionnaire, respondents will be asked to answer 20 questions on a vocabulary test adapted from Nation's Vocabulary Test, based off Brown Corpus vocabulary randomly. The final word list consists of *see, teacher, help, afternoon, drink, library, buy, there, graduate, new, sleep, number, speak, 9.45pm, do, bank, arrived, sad, coffee shop,* and *books.* The researcher will also seek guidance and advice from respective foreign language courses' lecturers to ensure the level of vocabularies given is on par with what the learners are exposed to since level 1 and in level 2. The questions will be given in both Mandarin and Japanese (refer to Appendix 1 (bi) and (bii).

3.3.3 MUSIC Inventory (College student version) Questionnaire

The MUSIC Inventory (College Student short-form version) includes 26 items that are used to create five scales (i.e., empowerment, usefulness, success, interest, and caring). The response options for each item are as follows: *1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Somewhat Agree, 5 = Agree, 6 = Strongly Agree.* A mean scale score is computed by averaging the items in each scale (refer to Appendix 2.

3.4 Data collection procedures

The sample will be purposive sampling where a targeted group of students are chosen to help with the study. In this research, students who have passed first level Mandarin or Japanese and are currently in the second level are the targeted groups. Researcher will ask for consent from each person before continuing on with the questionnaire and test.

The data will be collected through an extraction of Nation's Productive Vocabulary 2000-word Level Test, Nation's University Word List, Nation's Vocabulary Test (Mandarin & Japanese versions) and an adaptation of Jones' The Music Model of Motivation. The first two tests will help researcher in dividing the respondents into two groups of less proficient and proficient. The second part of data collection will be acquired through an adaptation of Nation's Vocabulary Test, consisting of 20 words out of the first 1000 words. The test was adapted due to the fact that second level Japanese and Mandarin students do not possess a total of 1000 word vocabulary to completely answer the original test. Hence, the researcher adapted the test by looking at the vocabulary that both foreign languages share in common, and then compare it to the list of vocabulary in the Brown Corpus. The final part of data collection is a questionnaire made up of 26 statements on the foreign language which requires respondents to rate the foreign language based on each statement on a likert scale of 1 to 5, each rating: 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree. These tests will determine the respondents' initial proficiency in English and their vocabulary size in their respective foreign language course while the questionnaire observes respondents' attitude towards the foreign language that they are currently taking.

3.5 Data analysis procedures

Figure 2. The flow of data analysis procedures.

The data has been acquired from the questionnaires will be analysed by using SPSS software through four main processes which are: 1) Data validation, 2) data editing, 3) data coding, and 4) data analysis. In the first process, data will be tested for their authentication using three simple steps. The first step is screening, to ensure that each respondent chosen was as per the research criteria of the target population. Then, the researcher will check whether the data collection procedure was followed accordingly. The last aspect to confirm data validation, researcher will make sure that each respondent answered all questions and tests, without leaving any empty spaces.

The second process is data editing. Since data entry is done manually, it is humane for errors to occur. So researcher should conduct basic data checks, check for outliers, and edit raw data to detect and empty out any data points that may impede the accuracy of the results. These errors are also possible if the respondents left a few questions unanswered.

Data coding is the third process. As per the name, all acquired data will be coded into numbers to make it possible to analyse. This is one of the most vital steps in preparing data. For instance, instead of having a wide range of different ages, researcher will create age category of each respondent, making it easier if researcher wants to find out the average age

of the respondents. The age will be grouped into different codes such as: (16 year olds – 20 year olds = 1, 21 year olds – 25 year olds = 2, 26 year olds – 30 year olds = 3, etc.).

The final process that will be carried out is data analysis, which is divided into two parts. The first part is descriptive analysis. The purpose of descriptive analysis (also known as descriptive data) is to provide absolute numbers that do not explain the rationale of those numbers. The research will be comparing the mean (μ), standard deviation (SD), and percentage (%) of FL, 2K, and AWL VLT scores to answer the first research question which is: Does knowledge of more than 2 languages help learners increase their foreign language (FL) vocabulary faster?

Table 1.
Data Analysis for the First Objective: To Explore Differences in Vocabulary Size between Learners Who Already Know Two Languages with Learners Who Know More Than Two

Research Question (1)	**Instrument**	**Data Analysis**
a. Does knowledge of more than 2 languages help increase their vocabulary faster? b. Does proficiency in 2K of English VLT help increase FL vocabulary? c. Does proficiency in he AWL of English VLT help increase subsequent FL?	SPSS (Descriptive Analysis & Independent Samples T-test)	Comparing the mean (μ), and standard deviation (SD) for the variablescores: • Proficient vs. Less Proficient learners • Multi-linguals vs Bilinguals • Between & within group differences

The second part of the analysis is the inferential analysis. This is done to generalize the results to the entire target group. Predictions about a larger population can also be made by looking at inferential data. These are complex analyses to show relationship between

variables, rather than just describing a single variable, which allows researcher to go beyond absolute values and understand the relations that have been found between 2 or more variables. For this research, another 2 analyses using SPSS will be carried out:

Table 2.
Data Analysis for the Second Objective: Verify Whether Learners' Initial Proficiency in English Influences Their Foreign Language Vocabulary Size

Research Question (2)	**Instrument**	**Data Analysis**
Are learners' scores in Mandarin/Japanese VLT affected by their 2K and AWL scores?	SPSS (ANOVA)	Test statistical difference of certain factors affecting increased vocabulary size.

Table 3.
Data Analysis for the First Objective: To Determine the Main Factors Influencing Bilingual and Multi-lingual Foreign Language Learners' Motivation in Increasing Their Vocabulary Size

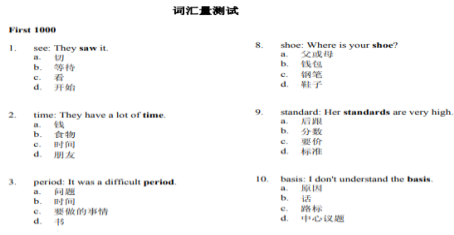
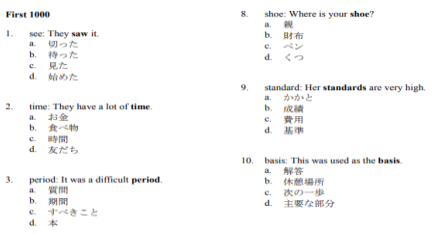
Research Question (3)	**Instrument**	**Data Analysis**
What are the main factors affecting learners' vocabulary development in FL courses?	SPSS Pearson's Correlation	Finding out the relationship between motivation factors, initial proficiency and scores, to be compared between Mandarin and Japanese learners.

CHAPTER 4

RESULTS

4.1 Background

44 respondents were acquired to participate in this research. The students were subjected to three different instruments. They were given a Mandarin/Japanese vocabulary levels test for the first 1000 words, depending on the language they were taking for the session. Both foreign language tests assessed 20 similar items for each foreign language class. The students' English language ability was also tested to create a baseline test for proficiency for general vocabulary and academic vocabulary knowledge. The Malay language was not selected as the students had already obtained a credit for their Malay, adding to the fact that there is no equivalent word list for the PVLT yet.

	
Mandarin 1K level	Japanese 1K Level
The 2000 word level 1. I'm glad we had this opp____ to talk. 2. There are a doz____ eggs in the basket. 3. Every working person must pay income t____. 4. The pirates buried the trea____ on a desert island. 5. Her beauty and cha____ had a powerful effect on men. 6. La____ of rain led to a shortage of water in the city. 7. He takes cr___ and sugar in his coffee. 8. The rich man died and left all his we___ to his son. 9. Pup____ must hand in their papers by the end of the week.	The AWL level 1. There has been a recent tr___ among prosperous families towards a smaller number of children. 2. The ar____ of his office is 25 square meters. 3. Phil_____ examines the meaning of life 4. According to the communist doc___ , workers should rule the world. 5. Spending many years together deepened their inti__ . 6. He usually read the sport sec___ of the newspaper first. 7. Because of the doctors' strike the cli___ is closed today. 8. There are several misprints on each page of this te__ .

10. This sweater is too tight. It needs to be stret___ . 11. Ann intro____ her boyfried to her mother. 12. Teenagers often adm____ and worship pop singers. 13. If you blow up that balloon any more it will bur__ . 14. In order to be accepted into the university, he had to impr____ his grades. 15. The telegram was deli_____ two hours after it had been sent. 16. The differences were so sl____ that they went unnoticed. 17. The dress you're wearing is lov____ . 18. He wasn't very popu_____ when he was a teenager, but he has many friends now	9. The suspect had both opportunity and mot___ to commit the murder. 10. They insp___ all products before sending them out to stores. 11. A considerable amount of evidence was accum___ during the investigation. 12. The victim's shirt was satu____ with blood. 13. He is irresponsible. You cannot re___ on him for help.
English 2K level	English AWL

Figure 2.Example of Nation's FL vocabulary test (Mandarin &Japanese), English 2K word level, & English AWL.

Out of a total of 44 respondents, 27 (61%) were bilinguals and 17 (39%) were multi-linguals as most Malaysian students know more than 2 languages. Since Mandarin was only made available to students who had not studied Mandarin or are not native speakers of Mandarin, there were evidently more Malay students taking this course.

4.2 Findings

The aim of this research is to know the factors that are contributing to increase in vocabulary knowledge in foreign language learning. 3 research questions will be answered in this part of the research. Some of the research questions are further elaborated for a more in depth analysis.

RQ#1:

1a. Does knowledge of more than 2 language help learners increase their vocabulary faster?

1b. Does proficiency in the 2K of the English VLT help increase subsequent FL vocabulary?

1c. Does proficiency in the AWL of the English VLT help increase subsequent FL?

In order to answer questions 1a-c, students' scores for the Japanese and Mandarin versions of the VLT 1K words, 2K level of English VLT, AWL level of English VLT were assessed. Table 4 provides the descriptive test scores for both bilingual and multi-lingual learners.

Table 4.

Description of Mean Scores for the Two Groups (Mandarin and Japanese)

Descriptives

VLT Scores		Groups	N	Mean	SD	SEM
FL	Mandarin	1	27	16.67	3.317	.638
Marks	Japanese	2	17	17.35	3.872	.939
2K	Mandarin	1	27	13.70	2.301	.443
	Japanese	2	17	15.29	2.867	.695
AWL	Mandarin	1	27	9.56	2.966	.571
	Japanese	2	17	11.18	3.107	.764

The individual marks for Mandarin and Japanese groups revealed the mean average of Mandarin learners to be 16.67 (SD=3.32), compared to Japanese learners who are at 17.35 (SD=3.87). This also shows that Mandarin group had scored lower points for the 2K and AWL levels as well when weighed against the Japanese group. The performances for the various tests are presented in Figure 3-5.

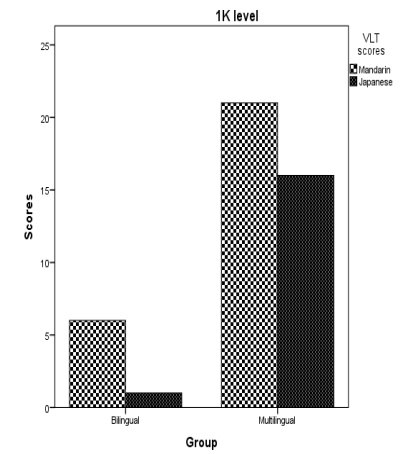


Figure 3. VLT (Mand/Jap)

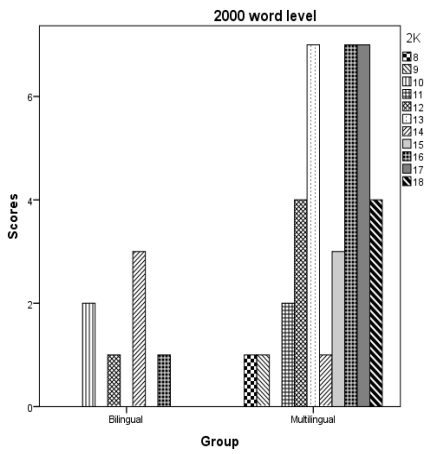


Figure 4. 2000 word level (Eng)

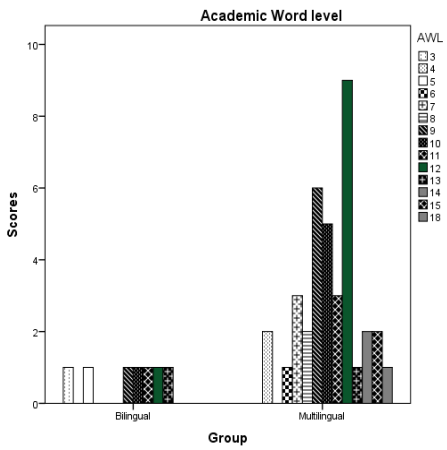


Figure 5. AWL word level

Overall, Japanese learners showed significance and reported higher scores for the 2K level (M=12.29, SD=2.3) than found in the population as a whole, t(42)=-2.029, p=.049. Table 5 represents the Independent Samples Test results for the various tests.

Table 5.

Independent Samples Test

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means				
						95% Confidence Interval of the Difference	
	F	Sig.	T	Df	Sig. (2t)	Lower	Upper
Marks	.048	.828	-.626	42	.534	-2.897	1.525
			-.604	30.227	.550	-3.005	1.632
2K	1.071	.307	-2.029	42	**.049**	-3.172	-.009
			-1.929	28.701	.064	-3.277	.096
AWL	.019	.891	-1.733	42	.090	-3.508	.266
			-1.715	32.948	.096	-3.544	.302

There was a significant difference in the scores for 2K level of English for Japanese learners (M=15.29, SD=2.3) and Mandarin (M=13.70, SD=2.3) with the conditions; t(42)=2.03, p=.049. The results specifically suggest that in the case of Japanese students, when they have higher vocabulary score for the 2K level in English, their vocabulary in FL increases.

Vocabulary research also suggests that learners are affected by initial proficiency (McLean et. al., 2013). The mean scores for the Japanese and Mandarin vocabulary tests revealed both groups to have near similar scores at 16.67 (SD=3.3) for Mandarin group and 17.35 (SD=3.9) for Japanese group. Both groups were fairly heterogeneous. Therefore, in order to account for learner differences, the groups were further divided into strong and weak learner groups with the cut-off point being 14-18 as proficient and <13 as weak. The distribution of the subgroups is presented in Table 6.

Table 6.
Scores on the Mandarin and Japanese Vocabulary Tests Based on Subgroups

		Mandarin		**Japanese**	
Nations VLT scores- 1K level		Frequency	%	Frequency	%
Group1 & 3	Strong>15	22	81.5	14	82.4
Groups 2 & 4	Weak<14	5	18.5	3	17.6
	Total	27	100.0	17	100.0

Approximately 82% of the students were proficient while 18-19% of both Mandarin and Japanese learners were weak in the subject. The next consequent step would be to determine if the difference in proficiency within groups would have an effect for learning Mandarin and Japanese in the classroom.

RQ#2: Are learners' scores in Mandarin/Japanese VLT affected by their 2K and AWL scores?

The learners' scores for the various tests were reassessed. Table 7 provides the descriptive scores of the subgroups.

Table 7.
Description of the Mean Average Scores for the Various Tests

Descriptives

		N	Mean	SD	Std. Error	95% LB	95% UB	Min.	Max.
2K	Mandarin High	21	13.67	2.266	.494	12.64	14.70	10	17
	Mandarin Low	6	13.83	2.639	1.078	11.06	16.60	9	16
	Japanese High	14	15.64	2.373	.634	14.27	17.01	12	18
	Japanese Low	3	13.67	4.933	2.848	1.41	25.92	8	17
	Total	44	14.32	2.622	.395	13.52	15.12	8	18
AWL	Mandarin High	21	9.57	2.959	.646	8.22	10.92	3	13
	Mandarin Low	6	9.50	3.271	1.335	6.07	12.93	4	14
	Japanese High	14	11.93	2.841	.759	10.29	13.57	7	18
	Japanese Low	3	7.67	1.528	.882	3.87	11.46	6	9
	Total	44	10.18	3.090	.466	9.24	11.12	3	18
VLT	Mandarin High	21	**17.95**	**1.431**	.312	17.30	18.60	15	20
	Mandarin Low	6	**12.17**	**4.215**	1.721	7.74	16.59	8	20
	Japanese High	14	**18.86**	**1.167**	.312	18.18	19.53	16	20
	Japanese Low	3	**10.33**	**4.619**	2.667	-1.14	21.81	5	13
	Total	44	16.93	3.513	.530	15.86	18.00	5	20

Subsequently, a One-way ANOVA between subjects was conducted to compare the effect of proficiency differences for Mandarin proficient, Mandarin weak, Japanese proficient, and Japanese weak conditions (refer to table 8).

Table 8.

One-way ANOVA for the Various Tests.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
2K	Between Groups	36.165	3	12.055	**1.859**	.152
	Within Groups	259.381	40	6.485		
	Total	295.545	43			
AWL	Between Groups	72.307	3	24.102	**2.850**	**.049**
	Within Groups	338.238	40	8.456		
	Total	410.545	43			
Marks	Between Groups	340.629	3	113.543	**23.883**	**.000**
	Within Groups	190.167	40	4.754		
	Total	530.795	43			

There was a significant effect of proficiency differences for AWL for the groups at the $p<.05$ level for the three conditions [$F(3, 40) = 2.850$, $p = 0.049$] and for the Foreign language marks at $p<.05$ for the three groups [$F(3,40) = 23.883$, $p = .000$].

Post hoc comparisons using the Tukey HSD test indicated that the mean score for the Japanese proficient groups ($M = 18.86$, $SD = 1.67$) was significantly different than the Japanese weak group ($M = 10.33$, $SD = 4.6$) and Mandarin weak ($M = 12.17$, $SD = 4.2$) groups. However, the Mandarin proficient groups ($M = 17.95$, $SD = 1.4$) did not significantly differ from Japanese proficient and weak groups.

It is possible to argue at this point that learners' initial proficiency at the 2K level serves as an underlying base for general vocabulary knowledge and raising awareness while the AWL is necessary for coping with university courses. Students who have a higher score

for these two levels stand a better chance of increasing their FL at the end of the first year and this is carried forward to the second level. However, this is also dependent on classroom motivation in terms of learner empowerment, usefulness, success, interest and caring nature of the instructor. These factors will be answered by RQ#3.

RQ#3: What are the main factors affecting learners' vocabulary development in FL courses?

A Pearson moment correlation analysis was conducted to measure the strength of association between Empowerment, Usefulness, Success, Interest and Caring in the FL classroom. There was less sense of Empowerment in the Mandarin class (M=3.9, SD=.66) compared to the Japanese class (M=4.0, SD=5.04) and a higher sense of Success among the Japanese group (M=4.8, SD=2.56) compared to the Mandarin group (M=4.10, SD=.70) (Refer table 9a and 9b below). The Japanese group was highly heterogeneous.

Table 9a.

Descriptive Statistics for Motivation Factors among Mandarin and Japanese Learners.

Descriptive Statistics

VLT scores		Mean	Std. Deviation	N
Mandarin	Empowerment	**3.8519**	**.66005**	27
	Usefulness	4.4519	.72024	27
	Success	**4.1037**	**.70246**	27
	Interest	4.1704	.75183	27
	Caring	4.3778	.74696	27
Japanese	Empowerment	**4.0000**	**.50498**	17
	Usefulness	4.2824	.51990	17
	Success	**4.8235**	**2.55723**	17
	Interest	4.3059	.58360	17
	Caring	4.0588	.66994	17

Table 9b.

Pearson Moment Correlation for Motivation Factors among Mandarin and Japanese Learners.

Correlations

VLT scores			1	2	3	4	5
Mandarin	Empowerment	P-Correlation	1				
		Sig. (2-tailed)					
	usefulness	P- Correlation	.107				
		Sig. (2-tailed)	.594				
	Success	P- Correlation	.034	.375			
		Sig. (2-tailed)	.865	.054			
	Interest	P- Correlation	.341	.551**	.562**		
		Sig. (2-tailed)	.082	**.003**	**.002**		
	Caring	P-Correlation	.052	.663**	.453*	.760**	
		Sig. (2-tailed)	.795	.000	.018	.000	
Japanese	Empowerment	P- Correlation	1				
		Sig. (2-tailed)					
	usefulness	P-Correlation	.505*				
		Sig. (2-tailed)	**.039**				
	Success	P- Correlation	-.006	.375			
		Sig. (2-tailed)	.982	.139			
	Interest	P- Correlation	.399	.241	.338		
		Sig. (2-tailed)	.113	.351	.184		
	Caring	P- Correlation	.177	.574*	.396	.507*	
		Sig. (2-tailed)	.496	**.016**	.116	**.038**	

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

4.3 Discussion

The purpose of the present study was to observe whether Malaysian undergraduates find it difficult to master a third or fourth language that is foreign by investigating their level of vocabulary size based off language competence and initial proficiency in English, and the main elements that influences their performance. The bilingual and multi-lingual groups differed only by a slight margin of not more than 0.5. Although it is not a substantial amount, from this small sample of bilinguals and multi-linguals, multi-lingual undergraduates did surpass the bilingual group, which is at the very least consistent with other research (e.g. Barac & Bialystok, 2012).

The results provide strong defence for the claim that bilingualism does affect language performance – in this case, foreign language (Mandarin/Japanese) – for it was stated that individuals who know more languages are equipped with further sensitivity to language as a system, resulting in better performance usually in a formal setting. However, it may also be influenced by language similarity based on individual backgrounds, and language schooling. In this case, most of learners who were learning Japanese as a foreign language were of Chinese background, while those who were learning Mandarin consisted of Malays, Indians, and Sarawakians. Whereas Chinese (Mandarin, Hokkien, Cantonese, etc) orthography is highly similar as that to Japanese kanji writing – an adaptation of Chinese symbols (Coderre, Fiippi, Newhouse, & Dumas, 2008), Malay, Tamil, and other languages do not really come from the same root as Mandarin. Therefore, it is presumably safe to say that both bilingual and multilingual Japanese learners would perform better than Mandarin learners.

Contrariwise, a different study by Bialystok, Luk, Peets, and Yang (2010) suggested that monolinguals scored higher in the Peabody Picture Vocabulary Test (PPVT) in comparison to bilinguals because there was a pattern of less vocabulary knowledge in bilingual learners in both languages they knew. Basically, this suggests that in terms of learner's vocabulary bank, knowing fewer languages would put the learner in advantage to having an extensive knowledge of different languages.

The nonverbal performance was also analysed based on learner's initial proficiency in English through two diagnostics tests: a) Nation's Productive Vocabulary Test (2000-word level), and b) Nation's University 1000 Vocabulary Level Test (University Word List). Both word lists included common English vocabularies that university students are expected to have acquired as their L2. Proficiency in English showed to have an effect on learners' performance in foreign language vocabulary acquisition where those who were more proficient in English had an overall higher score in the vocabulary test in comparison to the ones who were less proficient in English. This pattern is consistent with a comprehensive study on L1 and L2 relationship in the research by Sparks, Patton, Ganschow, and Humbach (2009), which indicated that skills in L1/L2 as well as L2/L3 aptitude are strong predictors of L2/L3 proficiency. Thus, learners with robust language establishments are expected to outperform learners with weaker language foundations.

According to the results, proficiency in English has an impact on FL vocabulary level, specifically as seen among Japanese learners as there were FL vocabulary differences found for the Japanese (AWL) proficient group, compared to the Japanese (AWL) weak and Mandarin (AWL) weak groups. However, Mandarin (AWL) proficient group did not significantly differ from the other groups. In short, while 2K level serves as a base for general

vocabulary knowledge and raising awareness, AWL is a necessity to cope with university courses, 2) students who have a higher score for these two levels stand a better chance of increasing their FL vocabulary level at the end of the first year, carrying it forward to the second level.

In research of language learning, motivation is a crucial factor. Hence, motivational aspects were also investigated in this study based on the MUSIC Inventory consisting of five principles (*eMpowerment*, *Usefulness*, *Success*, *Interest*, & *Caring*). Each principle was represented by four to six statements which were rated on a Likert scale from 1 (strongly disagree) to 5 (strongly agree): Empowerment, Usefulness, Success, Interest, and Caring. The factors of Empowerment, Usefulness, Success, Interest, and Caring from MUSIC model proved to have an effect on learners' FL vocabulary development in the classroom.

- **Empowerment**: A classroom system that practices liberty and flexibility motivates learners and results in better performance than when learners are forced into completing a task in a particular way (Ciani, Summers, Easter, & Sheldon, 2008).
- **Usefulness:** Students are also more motivated (short-term goals) when they understand the relevance of the assignments and contents of the course (Simons et al., 2004; Van Calster, Lens, & Nuttin, 1987).
- **Success:** The faith that students possess – innately believing that they can succeed in a course will instigate a consistent, resilient, and committed group of learners, and a more gratifying and relaxed learning environment (Schunk & Pajares, 2005).
- **Interest:** Long-term interest that are personal, internally activated, and topic-specific (Schraw & Lehman, 2001) has a positive impact on learners' memory, comprehension, attention, achievement, etc (Hidi & Renninger, 2006; Schunk et al., 2008).

- **Caring:** Good, caring relationships with instructors and faculty are reported as substantial for students (Levett-Jones, Lathlean, Higgins, & McMillan, 2009; Seymour & Hewitt, 1997) as a support system (Margolis & Fisher, 2002) – not only caring about students' academic performance, but also respecting their personal lives and well-being, which could disrupt the course requirements.

Based on the Pearson moment correlation analysis, it was found that factors affecting the Mandarin group's and Japanese group's vocabulary development slightly differ. It was shown that when Interest for the course increases in Mandarin learners, they are able to grasp the practicality (Usefulness) of the work given and perform better (Success) in the overall course, while Japanese learners are more driven when the instructor is attentive (Caring) towards their well-being, which also leads to increase in Interest, Usefulness, and Empowerment. Results showed that learner's motivations that are highly independent and attitude-based play a significant role in foreign language proficiency. This proves the importance of learner's overall attitude in relation to the foreign language as supported by Dörnyei and Chan (2013) who deducted an association between *Ideal L2 Self* and learners' effort in learning which affected learners' grades and proficiency in the language. A research conducted by Gonzales and Lopez (2015), examining the types of motives in learning an FL also denoted that self-reported skills and learners' attitudes towards FL learning are significantly influenced by FL motivation. Therefore, learners' attitude and interest in the foreign language are important – they must find the course interesting or it will directly affect their motivation which will also have an implication on their academic achievement (Jahedizadeh, Ghanizadeh, & Ghonsooly, 2016).

From the outcomes acquired, it is safe to say that the level of foreign language vocabulary acquisition of bilingual and multi-lingual learners in UNIMAS is fairly high. This is contributed by determinants such as learner's language competence, initial proficiency, and attitude towards the foreign language course. The study focused on vocabulary, deeming vocabulary as a crucial foundation for language proficiency; as Beglar and Hunt (2005) claimed that vocabulary acquisition is somehow the leading integral part of FL acquisition. The results of this study filled in the gap that was found in previous researches that widely focused on third language acquisition among monolinguals and bilinguals. Despite the small sample, in this research, it was proven that one's knowledge of more languages does make a slight contribution in language learning, be it L3 onwards or FL. As shown and discussed, a good, sturdy foundation in language which in this case is the initial proficiency of learners also play a part in acquiring vocabulary in another language. Additionally, the results attained established the importance of learners feeling in control over what they are learning in the classroom and the intensity of interest that they have for the course in nonverbal performance. On top of that, it was also found that lecturers have a substantial role in making sure students are motivated and understood in the classroom. In spite of all this, previous researches claimed that not only are language learners influenced by bilingualism or multi-lingualism, initial proficiency, and motivation elements, their level of language acquisition is also affected by language similarity and language schooling.

CHAPTER 5

CONCLUSION

5.1 Summary

The present study aimed to observe whether Malaysian undergraduates find it difficult to master a third or fourth language by considering learners' language competence, English proficiency, and motivational factors among 2nd level foreign language students in UNIMAS. The research focused on three specific research questions and objectives as shown below:

a. Research Questions

1a. Does knowledge of more than 2 languages help learners increase their vocabulary faster?

1b. Does proficiency in the 2000 word (2K) of the English Vocabulary Level Test (VLT) help increase FL vocabulary?

1c. Does proficiency in Academic Word List (AWL) of the English VLT help increase subsequent FL?

2. Are learners' vocabulary scores in Mandarin/Japanese VLT affected by initial word knowledge in English?

3. What are the factors affecting learners' vocabulary development in FL courses?

b. Objectives

1. To explore differences in vocabulary size between learners who already know two languages (bilinguals) with learners who know more than two languages (multi-linguals).
2. To verify whether learners' initial proficiency influences their FL vocabulary size.
3. To determine the main factors influencing bilingual and multi-lingual foreign language learners' motivation in the classroom.

The research was framed based on Hall and Ecke's (2003) cross lexical influence concepts of *Learner, Learning,* and *Language*, and motivation strategies based on Jones' (2009; 2015) MUSIC Model of Motivation, encapsulating five principles: *eMpowerment*, *Usefulness*, *Success*, *Interest*, and *Caring*. Quantitative research design was chosen for this research to construe traits of broader groups beyond UNIMAS students. Researcher conducted purposive-sampling among UNIMAS students according to the following criteria: Bilingual or multi-lingual, is registered in a 2nd level foreign language course (Mandarin/Japanese), and has not been comprehensively exposed to the language formally or informally.

A questionnaire consisting of 4 sections was distributed in the respective classes to evaluate learners' initial proficiency in English, adopted from Nation's Productive Vocabulary Levels Test (2K-word level) and Nation's University AWL; FL vocabulary size, adapted from Nation's Vocabulary Test (Japanese & Mandarin versions); and motivation factors, adopted from MUSIC Inventory. Data was collected for a period of one month, from mid-February 2020 until mid-March 2020. Researcher had to contact the 2nd level Mandarin

lecturer to ask for her assistance in distributing the questionnaire. Unfortunately, researcher was not able to get in touch with 2nd level Japanese lecturer, so a 2nd level Japanese student had helped, instead.

The results of the experiment are as follows: Both bilingual and multilingual groups did not imply any significant differences in FL vocabulary size to indicate that knowledge of more than 2 languages will help learners increase their FL vocabulary faster. However, it does not nullify the fact that the multilingual group overpassed bilingual group in FL vocabulary performance by a small margin. As research by Bialystok, Majunder, and Martin (2003) had shown evident advantage for bilingual children over monolingual children in vocabulary and linguistics tasks, this research also found no distinctions between bilingual and multilingual learners in the FL vocabulary test.

When reflecting back to the FL mean scores for both groups, outcomes proved distinction between Japanese and Mandarin learners with higher and lower English proficiency as L2/L3. Learners who were vastly proficient in English – particularly those who scored high in AWL – performed better in FL vocabulary test, while learners with weaker conduct of English vocabulary had lower FL vocabulary acquisition, overall. Adding to the results of a study done by Sparks, Patton, Ganschow, and Humbach (2009) on L1-L2 relationship that claimed the significance of early first language in L2 proficiency, the present study also established the importance of English as L2 or L3 in FL vocabulary aptitude.

Motivation factors that influence bilingual and multilingual FL learners in the classroom vary widely between the Mandarin and Japanese groups. The end results showed Mandarin group was more driven to excel when their level of interest in the course is high,

whereas the environment in the classroom and attention given by the lecturer were seen as most vital for the Japanese group to strive harder in the course. Instead of showing importance of *Ideal L2 Self* on language performance (Dörnyei & Chan, 2013), – in this case would be the factor of Success and Usefulness, the results of the study proved the effect of learners' interest and learning environment on FL vocabulary proficiency.

To summarise, findings of the study further strengthen past researches results, expanding the scope to multi-linguals as well as adding facts that evidence to significance of English as a basis, Interest and Caring as motivation factors for language learning among Malaysian undergraduates. Malaysian undergraduates find it difficult to master a third or fourth language due to several factors: a) inept level of basic English, b) non-encouraging classroom environment, c) lack of interest in FL course, and d) poor lecturer-student relationship.

5.2 Implications of Findings

Given the importance of English and Foreign vocabulary knowledge to tertiary students, an understanding of initial proficiency can help instructors reach out to their students in a more effective manner and help them learn faster. It is presently certain that basic university level in English impacts students' academic accomplishment. Henceforth, institutions should make an effort to improve students' English proficiency in order to result in a better overall academic performance.

As proven, an understanding of both initial vocabulary and classroom factors that motivate can help teachers teach and influence their foreign language learners better. In

making sure that learners harvest the most in a classroom setting, lecturers will need boundless determination to ensure interest and advocate caring and respect to the students.

Besides, the results can also contribute in redesigning curricula to a more constructive manner by looking at vocabulary knowledge and classroom factors to improve both foreign language learning and vocabulary instruction. This study helps create awareness on the topic and provide insights on how to address an easily overlooked foreign language mastery problems.

5.3 Recommendation for Future Research

The research was conducted on a small sample of only 44 bilingual and multi-lingual foreign language learners. Due to the size of the sample – although sufficient for statistical analysis, the results may not be adequate to be generalised to the whole population of foreign language learners across Malaysia. Therefore, further investigation should be carried out on a larger scale in other institutions or states to provide a more stable and valid results. In conjunction with that, future researches can also consider analysing other foreign language courses such as French, Arabic, Spanish, etc.

Although this research can be an adequate contribution for future reference, in accordance to past researches, there is a possible correlation between language similarity based on individual background and language schooling on foreign language learning. Therefore, the researcher believes that further research needs to be conducted to investigate and understand more of this phenomenon and its factors by looking from other various perspectives.

Another alteration of the research that can be done in the future is by not only considering language competence, initial proficiency in English, and motivational elements as determinants of foreign language performance, but also including other factors that have been proven to have a positive effect on language learning, for instance, language similarity based on individual language background, ethnicity, and amount of language exposure. Future research can also consider comparing learners' vocabulary level at the beginning of the course and near the end of the course in order to truly observe the effects and progress in learners' foreign language vocabulary acquisition.

In addition, the research at hand specifically evaluated learners' acquisition of foreign language vocabulary which had put a limitation to only nonverbal performance. Researcher believes that it would be a good opportunity to not only assess learners' vocabulary level, but also learners' listening, speaking, reading, and comprehension skills to evaluate them holistically, from every direction possible. Therefore, if it is to be done, it would be advisable to conduct this particular research among foreign language learners with deeper exposure of the language. The aforementioned amendments will ensure the increase of validity and reliability of the results as it will provide a more focused and comprehensive analysis.

In spite of these limitations, the findings do suggest significant information that further emphasise the importance of classroom environment and learner's interest on their academic performance. Increase in vocabulary size among foreign language learners can also help reinforce awareness about effective teaching styles – addressing the magnitude of vocabulary, and its use and usage in the learning process. Consequentially, results provide insights on ways for the government, organisations, university, and language teachers to

overcome foreign language limited vocabulary knowledge among foreign language learners, and guidelines for a more systematic learning.

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APPENDICES

Appendix 1

a) Diagnostics Tests (Taken from Productive Vocabulary Levels Test)

i. Nation's Productive Vocabulary 2000-word Level Test

1. I'm glad we had this opp_____ to talk.
2. There are a doz_____ eggs in the basket.
3. Every working person must pay income t_____.
4. The pirates buried the trea_____ on a desert island.
5. Her beauty and ch_____ had a powerful effect on men.
6. La_____ of rain led to a shortage of water in the city.
7. He takes cr_____ and sugar in his coffee.
8. The rich man died and left all his we_____ to his son.
9. Pup_____ must hand in their papers by the end of the week.
10. This sweater is too tight. It needs to be stret_____.
11. Ann intro_____ her boyfriend to her mother.
12. Teenagers often adm_____ and worship pop singers.
13. If you blow up that balloon any more it will bu_____.
14. In order to be accepted into the university, he had to impr_____ his grades.
15. The telegram was deli_____ two hours after it had been sent.
16. The differences were so sl_____ that they went unnoticed.
17. The dress you're wearing is lov_____.
18. He wasn't very popu_____ when he was a teenager, but he has many friends now.

ii. Nation's University Level Word Test

1. There has been a recent tr_____ among prosperous families toward a smaller number of children.
2. The ar_____ of his office is 25 square meters.
3. Phil_____ examines the meaning of life.
4. According to the communist doc¬¬_____, workers should rule the world.
5. Spending many years together deepened their inti_____.
6. He usually reads the sports sec_____ of the newspaper first.
7. Because of the doctors' strike, the cli_____ is closed today.
8. There are several misprints on each page of this te_____.
9. The suspect had both opportunity and mot_____ to commit the murder.
10. They insp_____ all products before sending them out to stores.
11. A considerable amount of evidence was accum_____ during the investigation.
12. The victim's shirt was satu_____ with blood.
13. He is irresponsible. You cannot re_____ on him for help.
14. It's impossible to eva_____ these results without knowing about the research methods that were used.
15. He finally att_____ a position of power in the company.
16. The story tells about a crime and subs_____ punishment.
17. In a hom_____ class all students are of a similar proficiency.
18. The urge to survive is inh_____ in all creatures.

b) Vocabulary Tests (Taken from Nation's Vocabulary Test)

i. Mandarin Version

Instruction
Choose only 1 answer.

1. see: They **saw** it.
a. 听
b. 坐
c. 看
d. 睡觉

2. teacher: He is a **teacher**.
a. 老师
b. 咖啡
c. 哥哥
d. 朋友

3. help: Can they **help** him?
a. 已经
b. 帮
c. 认识
d. 每天来

4. afternoon: Her hobby is drinking tea in the **afternoon**.
a. 晚上
b. 喜欢
c. 下午
d. 早上

5. drink: Do you want to **drink** some tea?
a. 热闹
b. 很困
c. 喜欢
d. 喝

6. library: They went to the **library**.
a. 大学
b. 油站
c. 图书馆
d. 书店

7. buy: I need to **buy** winter clothes.
a. 去看看
b. 买
c. 帮
d. 看

8. there: The school is right **there**.
a. 这里
b. 那里
c. 哪里
d. 里面

9. graduate: I will **graduate** next year.
a. 毕业
b. 给
c. 做毕业论文
d. 明年?

10. new: She is my **new** friend.
a. 快乐
b. 不是新的
c. 迟
d. 新

11. sleep: I **slept** at 11pm.
a. 喜欢
b. 睡觉
c. 吃了很多
d. 看戏

12. number: Is this the right **number**?
a. 岁
b. 人
c. 讲师
d. 号码

13. speak: They are **speaking** in English.
a. 说
b. 听英语
c. 吃
d. 容易

14. 9.45am: Office hours start from **9.45am** until 6.45pm.
a. 晚上 9 点 45 分
b. 9 点 45 分
c. 早上 9 点 45 分
d. 下午 9 点 45 分

15. do: I like to **do** work.
a. 坐
b. 做
c. 很饿了
d. 因为

16. bank: The **bank** is closed now.
a. 银行
b. 医院
c. 厕所
d. 食堂

17. arrive: We **arrived** early.
a. 到
b. 学习
c. 迟到
d. 没有去

18. sad: I am **sad**.
a. 冷
b. 觉得
c. 困
d. 不高兴的

19. coffee shop: There is an old **coffee shop** around the corner.
a. 家
b. 热水
c. 咖啡店
d. 灯

20. book: She likes **books**.
a. 看书
b. 看医生
c. 书
d. 买书

i. Japanese Version

Instruction
Choose only 1 answer.

1. see: They **saw** it.
a. ききます
b. すわります
c. みる
d. ねます

2. teacher: He is a **teacher**.
a. せんせい
b. カフェ
c. あに
d. ともだち

3. help: Can they **help** him?
a. すでに
b. てつだう
c. わかります
d. まいにちきます

4. afternoon: Her hobby is drinking tea in the **afternoon**.
a. ばん
b. すき
c. ごご
d. あさ

5. drink: Do you want to **drink** some tea?
a. にぎやか
b. とってもふとい
c. すき
d. のむ

6. library: They went to the **library**.
a. だいがく
b. ガソリンソタンド
c. としょかん
d. しょてん

7. buy: I need to **buy** winter clothes.
a. みてください
b. かう
c. たすけて
d. みます

8. there: The school is right **there**.
a. ここ
b. そこ
c. どこ
d. なかで

9. graduate: I will **graduate** next year.
a. そつぎょう
b. あげます
c. にぎやか
d. せんえん

10. new: She is my **new** friend
a. おめでとう
b. あたらしくない
c. おどい
d. あたらしい

11. sleep: I **slept** at 11pm.
a. すき
b. ねる
c. たくだんたべる
d. えいがをみます

12. number: Is this the right **number**?
a. ねんれい
b. ひと
c. せんせい
d. ばんご

13. speak: They are **speaking** in English.
a. はなす
b. えいごをききます
c. たべます
d. かんたん

14. 9.45am: Office hours start from **9.45am** until 6.45pm.
a. ごご 9 じ 45 ぶ
b. 9 じ 45 ぶ
c. ごぜん 9 じ 45 ぶ
d. ごご 9 じ 45 ぶ

15. do: I like to **do** some writing in my free time.
a. すわります
b. する
c. おなかがすいてる
d. なぜなら

16. bank: The **bank** is closed now.
a. ぎんこ
b. びょういん
c. トイレ
d. しょくど

17. arrive: We **arrived** early.
a. とちゃく
b. べんきょう
c. ちこくする
d. いかない

18. sad: I am **sad**.
a. さむい
b. むりょう
c. ねむい
d. かなしい

19. coffee shop: There is an old **coffee shop** around the corner.
a. いえ
b. おゆ
c. コーヒー ショップ
d. おんがく

20. book: She likes **books**.
a. ほんをよむ
b. かぞく
c. ほん
d. ほんをかいます

Appendix 2

MUSIC Inventory (College student version, present tense)

(to be administered ear the beginning or middle of a course, although it can be used at the end)

Part1

Instructions

Please rate the items in this section using the following scale:

1 Strongly disagree	**2** Disagree	**3** Somewhat disagree	**4** Agree	**5** Strongly agree

Note that the word **"coursework"** refers to anything that you do in the course, including assignments, activities, readings, etc.

_____ 1. The coursework holds my attention.
_____ 2. I have the opportunity to decide for myself how to meet the course goals.
_____ 3. In general, the coursework is useful to me.
_____ 4. The instructor is available to answer my questions about the coursework.
_____ 5. The coursework is beneficial to me.
_____ 6. The instructional methods used in this course hold my attention.
_____ 7. I am confident that I can succeed in this coursework.
_____ 8. I have the freedom to complete the coursework in my own way.
_____ 9. I enjoy the instructional methods used in this course.
_____ 10. I feel that I can be successful in meeting the academic challenges in this course.
_____ 11. The instructional methods engage me in this course.
_____ 12. I have options in how to achieve the goals of the course.
_____ 13. I enjoy completing the coursework.
_____ 14. I am capable of getting a high grade in this course.
_____ 15. The coursework is interesting to me.
_____ 16. The instructor is willing to assist me if I need help in the course.
_____ 17. I have control over how I learn the course content.
_____ 18. Throughout the course, I have felt that I could be successful on the coursework.
_____ 19. I find the coursework to be relevant to my future.
_____ 20. The instructor cares about how well I do in this course.
_____ 21. I will be able to use the knowledge I gain in this course.
_____ 22. The instructor is respectful of me.
_____ 23. The knowledge I gain in this curse is important for my future.
_____ 24. The instructor is friendly.
_____ 25. I believe that the instructor cares about my feelings.
_____ 26. I have flexibility in what I am allowed to do in this course.

Part 2

Instructions

Please provide the following information by ticking in the box or writing your response in the space provided.

Gender:	☐Male ☐Female
Age:	☐19 ☐20 ☐21 ☐22 Other:_____
Foreign language course:	State: _____
Language competency:	Are you bilingual or multilingual? ☐Bilingual ☐Multilingual
Language dominance:	Among the language that you can speak, which one is more dominant than the other? State: _____
Environment:	Do you live in a Japanese/Chinese-speaking community? ☐Yes ☐No
Foreign language teacher:	Have you ever had or do you have a native Japanese/Chinese teacher? ☐Yes ☐No